

REMARKS

In response to the Official Action of January 10, 2008, claims 1, 2, 5, 7, 13, 17, 18, 21, 23, 25, 26, 34, 42, 43, 53, 55, 58-60, 64, and 65 have been amended and claim 77 is newly submitted.

Support for the amendment to the claims is found in the original application as filed, including Figures 1, 15, and 15 and in the specification, including page 12, line 21 through page 14, line 31.

With respect to claim 55, this claim recites a processor and an output. Basis for this amendment is found in the original application as filed, including the specification at page 14, lines 4-6. It is considered implicit that announcements are generated by a processor in the service directory server.

Specific support for the amendment to claims 58-60 to recite a processor and a receiver is found in the original application as filed, including the specification at page 36, lines 20-24.

Specific support for the amendment to claims 64 and 65 to recite a computer-readable storage medium having stored thereon a data structure is found in the original application as filed, including the specification at page 15, lines 4-19.

Objection to the Specification

At section 2, the title of the invention is stated as being non-descriptive. A new title is presented which is believed to be descriptive.

Claim Rejections - 35 USC §112

At sections 3 and 4, claim 59 is rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The objected to phrase has being corrected, it being a typographical error.

Claim Rejections - 35 USC §101

At sections 5 and 6, claims 1, 2, 5, 7, 9, 10, 13, 15, 21, 22, 25-29, 31, 34, 42-45, 53-55, 58-61, 64, 65, 75, and 76 are rejected under 35 USC §101 as directed to non-statutory subject matter.

With respect to claims 1, 2, 5, 7, 9, 10, 13, 15, 21, 22, 25-29, 31, 34, 43-45, 53, 54, 75, and 76, the Office states that these claims fall under the judicial exception of an abstract idea which lacks a useful, concrete, and tangible result. Amendment to these claims has been made to set forth a useful, concrete, and tangible result; namely, that the first and second set of announcements are transmitted. Support for this amendment is found in the original application as filed, including page 14, lines 4-15.

The amendment to these claims is consistent with the suggested language as set forth by the Office at section 6 of the Action. It is therefore respectfully submitted that claims 1, 2, 5, 7, 9, 10, 13, 15, 21, 22, 25-29, 31, 34, 42-45, 53-55, 58-61, 64, 65, 75, and 76 are statutory.

Claims 42, 58-61, 64, and 65 are rejected as directed to non-statutory subject matter on the grounds that the claims lack the necessary physical articles or objects to constitute a machine or manufacture within the meaning of 35 USC §101. Claim 42 is now believed to be statutory in view of the amendment to claim 1 and specifically recites a computer readable storage medium encoded with instructions for carrying out the actions according to claim 1.

With respect to independent apparatus claim 58, this claim has been amended to recite a processor and a receiver, wherein the receiver is configured to selectively receive a first set of announcements describing a plurality of sessions transmitted through a network and to provide a first set of announcements to the processor, as well as being configured to selectively receive a second set of announcements describing at least one updated session and to provide a second set of announcements to the

processor. Claim 58 therefore recites physical articles which constitutes a machine within the meaning of 35 USC §101.

Since claim 58 is believed to be statutory, it is respectfully submitted that dependent claims 59-61 are also statutory.

With respect to independent claim 64, this claim has been amended to recite a computer readable storage medium having stored thereon a data structure comprising two sets of announcements with the characteristics as defined therein. It is respectfully submitted that the two sets of announcements described in claim 64 constitute functional data and not non-functional descriptive material as argued by the Office. This conclusion is reached because the announcements have a data structure and therefore such announcements enable updated sessions to be quickly and efficiently announced. The announcement of updated sessions thereby constitutes a useful, tangible, and concrete result.

It is therefore respectfully submitted that the announcements recited in claim 64 have a data structure which can enable an apparatus to announce sessions with increased speed and efficiency. It is therefore respectfully submitted that claim 64 is directed to statutory subject matter.

For similar reasons, claim 65 is also directed to statutory subject matter in view of the amendment thereof.

Claim Rejections - 35 USC §102

At section 8, claims 1, 2, 5, 7, 9, 10, 13, 15, 21, 22, 25-29, 31, 34, 42-45, 53-55, 58-61, 64, 65, 75, and 76 are rejected under 35 USC §102(e) as anticipated in view of US patent 7,080,078, Slaughter, et al (hereinafter Slaughter).

With respect to claim 1, it is asserted that Slaughter teaches a method of announcing sessions transmitted through a network, including the actions recited in claim 1 of providing a first set of announcements describing a plurality of sessions and providing a second set of announcements describing at least one updated session.

Overview of the Present Invention as Claimed in Contrast to Slaughter

As set forth in the present application, including the Background Art section and the Summary of the Invention section, the present application describes an Internet Protocol (IP) datacasting network which can be used to deliver IP services, such as on-line newspapers, radio, television, music, video, picture, games and software. IP services are organized into sessions, each session being transmitted on a given IP address, at a given time. As will become clear, sessions are temporal in nature.

To enable users to discover and access a session, the network transmits a service guide in the form of a set of announcements that describe the sessions, for example by specifying the content, IP address and time of transmission.

Sessions can be updated. For instance, session content may be altered or a session transmission time may be changed. If users are to access sessions correctly, they must be notified of updated sessions. According to the present invention, there is provided a method comprising generating a first set of announcements describing a plurality of sessions transmitted through a network and generating a second set of announcements describing at least one updated session.

This has the advantage that updated sessions can be announced quickly and efficiently. Thus, a user does not have to download an entire service guide before being notified of an updated session.

Slaughter describes a system for interacting and accessing shared content among clients and services in a distributed computer environment (see abstract).

The system uses object repositories, referred to as "spaces", to allow service providers to advertise their services and to permit clients to find advertisements for the services and to use the information in the advertisements to access a service (see column 7, lines 43-56). A service is an entity that can be used by a person, a program, or another service and examples include printing a document and translating word processor formats (see column 2, lines 46-56).

Slaughter is directed to how to provide a more efficient mechanism for locating

object stores (see column 6, lines 46 and 47).

This is achieved in part by means of spontaneous and heterogeneous distributed systems based upon an asynchronous message passing model, where data and/or objects may be represented in a representation language such as XML (see column 58, lines 56 to 60).

In Slaughter, once a selected space is accessed, the client may look up service advertisements within that space, which may lead to additional spaces (see column 43, lines 2 to 4). A space is a service, so like any other service, it can be advertised in another space (see column 42, lines 27 and 28).

A device, such as a printer, may have a built-in default service that finds a space on a local area network and adds an advertisement for the printer service to that space (see column 53, lines 58-62).

Thus, Slaughter is not concerned with delivery of content in the form of sessions, but with provision of services.

Response to the Rejection of Claim 1

It is respectfully submitted that all of the features of Slaughter cannot be simultaneously read onto corresponding features of claim 1. In fact, it is submitted that the Office does not clearly specify correspondence between the features of claim 1 and Slaughter.

For example, it appears that the Office considers that the feature of claim 1 of providing a first set of announcements describing a plurality of sessions is taught by Slaughter in column 41, lines 20-22, which discloses:

“..., space services in the distributed computing environment may use the Multicast Announcement Protocol (multicast UDP) to announce themselves on a LAN.”

Thus, it appears that the Office considers that packets conforming to the Multicast Announcement Protocol disclosed in Slaughter are equivalent to the first set of announcements specified in claim 1, and that the space services are equivalent to

the plurality of sessions.

It seems that the Office considers that the feature of providing a second set of announcements describing at least one updated session is taught by Slaughter in column 21, lines 38-40, which discloses:

“...the gate may be modified as to the contents of the message schema after the gate is created, including deleting, adding, or modifying messages in the message schema”,

and in column 50, lines 44-47, which discloses:

“...to update the various security policies of the space, and other administrative facilities. For example, the number and age of advertisements may be controlled and monitored by a root space service”.

Thus, it appears that the Office considers that the modified gate (modified message schema), updated security policies, updated administrative facilities, and/or the advertisements controlled as to their number and age are equivalent to either the second set of announcements or the at least one updated session.

On the one hand, it is submitted that none of the above-mentioned Slaughter passages discloses generating a second set of announcements, let alone a second set of announcements describing at least one updated session.

For example, the message gate merely defines a set of messages that a client may send (and receive from) a service (see column 20, lines 56 and 57) and thus, modifying a message gate merely entails modifying computer code or data stored at a client or server.

Likewise, the advertisements are merely stored at the space to be searched and/or browsed by a client (see also column 45, lines 46-51). Thus, controlling the number of advertisements merely involves modifying data stored at the space.

On the other hand, even if it assumed (which applicants do not) that the passages referred to by the Office disclose the at least one updated session, then it becomes apparent that there is no disclosure in these passages of generating the

second set of announcements.

In any case, Slaughter does not disclose modifying or updating any of the identification information of a space service which is included in the Multicast Announcement Protocol packet (e.g., URI, keywords) and thus the packet would be the same both before and after the modifying or updating described in Slaughter.

Therefore, it is respectfully submitted that all of the features of Slaughter cannot be simultaneously read onto corresponding features of claim 1.

Secondly, it is respectfully submitted that the Office has strained the interpretation of the wording of the reference to support the arguments presented in the Official Action and that, in fact, Slaughter discloses a fundamentally different system from the present invention. For example, it is respectfully submitted that Slaughter does not disclose generates a first set of announcements describing a plurality of sessions transmitted through a network.

Slaughter merely discloses that space services may announce themselves on a LAN (see column 41, lines 19-23). Then, a client may request a listing, tree, or other representation of all services advertised in the space and a space may also provide a look-up facility that allows a client to search for a service by providing keywords or string names (see column 45, lines 46-51).

In other words, in Slaughter, advertisements are merely stored at the space to be browsed and/or searched by a client and are not pushed to the client in the form of announcements.

Indeed, one aspect of Slaughter concerns providing services to small devices with small memory footprints (see column 6, lines 61-63). Therefore, it would not be desirable for a space to send a plurality of advertisements to a device because storing these advertisements may require too much memory on the device.

Furthermore, it is noted that the sessions in claim 1 are transmitted at given times. However, the services of Slaughter are not scheduled, unlike the sessions of the present invention. Therefore, in Slaughter, the device would not require announcements, but could merely look up a service whenever a particular type of

service is required (see column 45, lines 46-51).

Slaughter does not disclose providing a second set of announcements describing at least one updated session. As explained earlier, there is no disclosure of providing a second set of announcements in the passages referred to by the Examiner.

Slaughter discloses that a client may register to obtain notification when something is added to or removed from the space (column 46, lines 43-45). An event may include a URI to the affected advertisement (see column 48, lines 1-8).

However, the notification merely provides a reference to an affected advertisement stored at the space and thus is not an announcement describing at least one updated session. For example, on receiving such a notification, a client would still have to access the space service, receive the affected service advertisement and construct a gate for access to the desired service (see column 48, line 59 to column 49, line 17).

Therefore, Slaughter discloses a fundamentally different system from the present invention.

In summary, Slaughter does not disclose sessions transmitted over a network, let alone generating the announcements of sessions as specified in claim 1, and so it is respectfully submitted that claim 1 is not anticipated by Slaughter.

Furthermore, it is respectfully submitted that claims 42, 43, 53, 55, 58, 64 and 65 are not anticipated by Slaughter for similar reasons as presented above with respect to claim 1.

Furthermore, it is respectfully submitted that claims 2, 5, 7, 9, 10, 13, 15, 21-22, 25-29, 31, 34, 44, 45, 54, 59-61, and 75-77 are not anticipated by Slaughter at least by way of dependency.

Claim Rejections - 35 USC §103

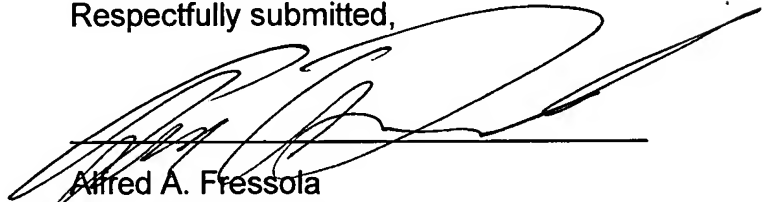
At section 10, claims 17, 18, and 23 are rejected under 35 USC §103(a) as unpatentable over Slaughter in view of US patent application publication 2001/0037500, Reynolds, et al (hereinafter Reynolds).

Each of these claims ultimately depend from an independent claim which is believed to be allowable and therefore each of these claims is also believed to be allowable at least in view of such dependency.

It is further noted that a person of ordinary skill in the art would not likely consider combining the teaching of Slaughter with the teaching of Reynolds. This is because doing so would require a substantial reconstruction and redesign of the system of Slaughter, as well as the change of the basic principle under which Slaughter is designed to operate. For example, Slaughter is concerned with services in a distributed computing system, whereas Reynolds is concerned with interactive and enhanced television systems.

In view of the foregoing, it is respectfully submitted that the present application as amended is in condition for allowance and such action is earnestly solicited.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Alfred A. Fressola', is written over a horizontal line.

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